A NEW GENUS OF STREBLIDÆ.

By Charles H. T. Townsend.

The following form is of exceptional interest as representing a new genus of ancient affinities in the very interesting Pupiparous family Streblida, as coming from the little-known region of north-western Peru, and as inhabiting a host hitherto known only from the description and figures published in 1877 with record of occurrence at Tumbez, Peru, on the Gulf of Guayaquil, but rediscovered by the writer at Piura.

SNYTHESIOSTREBLA gen. nov.

Approaches Trichobius in wing character and Megistopoda in hind legs. Thorax conspicuously broader than long, gently widened posteriorly. Scutellum short, subcrescentic, bulged posteriorly, gently concave on anterior border. Abdomen narrowed, segments not distinct. Extra hind crossvein between fifth and sixth vein opposite to end of first vein, only a little distad of small crossvein, latter close to origin of third vein whose base is bent abruptly costad from it, no emargination of distal wing-border; the wings elongated, about two and one-half times as long as broad, fully developed and functional, with the characteristic six longitudinal and three crossveins, the first vein ending but slightly beyond middle of wing, thus contrasted with both Strebla and Trichobius. Front legs very short, middle legs a little longer, the femora, tibiae and tarsi in these about equal as to length in same pair of legs; hind legs nearly three times as long as front ones, the hind metatarsi much elongated, the hind coxae enlarged and elongated; last tarsal joint of all feet moderately elongated and widened, the claws not toothed. Eves present. Antennae normal. Habitat on the very rare and littleknown bat, Amorphochilus schnablii Peters, ranging from Piura to Tumbez, in the northern coast region of Peru.

Type, Synthesiostrebla amorphochili n. sp.

Synthesiostrebla amorphochili new species.

Length of body, fully 1 mm.; hind legs, scant 1.5 mm; front legs, 0.4 mm.; middle legs, 0.5 mm.; wings, 1.2 mm. One specimen, probably female, from bat collected at Piura, Peru, February 1, 1911 (Townsend).

Entire insect pale brownish-yellow, abdomen more deeply colored, claws black. Front edge of mesoscutum with a pair of strong teeth on median line directed anteriorly and fitting into corresponding grooves in back of head. A pair of strong bristles, longer than any others on body, situated near hind margin of mesoscutum on median line in front of scutellum. Body and legs with many stiff short sharply-pointed bristles, a few also on costa. Wings clear, veins yellowish. Shorter bristles over legs, wing costa, and on distal borders of the leaf-like palpi.

The host was determined by Mr. E. W. Nelson, of the Biological

Survey, Washington.

Regarding the venation of the *Streblidæ*, it must be noted that the veins appear to have evoluted outwardly or distally, especially the inner basal veins, greatly elongating the second and third basal cells from the Holometopan type by drawing their crossveins nearer to the wing-tip. Hence what is called in the above description the extra hind crossvein is probably the crossvein of the anal or third basal cell, and the first or outer hind crossvein (between the fourth and fifth veins) is probably the cross vein of the second basal cell, while the true (Holometopan) hind cross vein has been lost. At all events these second and third basal-cell crossveins are no longer apparent in their ordinary position (judged by the Holometopan type) in the *Streblidæ*, and the general outward trend of all the veins exhibited by this family supports the above conclusion. The effect has perhaps been accelerated by a concurrent shortening of the wings, as suggested in Aspidoptera.

Synthesiostrebla stands farther removed from Strebla on both venational and mesoscutal characters than does Trichobius. It represents a relatively less outward evolution of the veins than that shown in any hitherto known Streblid genera, and thus appears to be a persisting fragment of an older and probably an ancient Pupiparous stock. The fourth, fifth and sixth veins do not reach the wing border, stopping farther from latter than in Trichobius, while even the third vein stops slightly short of apical border. The form is in all probability a relic by direct descent from an old stock stranded in western America since the Mesozoic—a stock that accompanied the northward dispersals between Antarctic and

South America during or prior to the Cretaceous.